

REMARKS

Claims 1, 11, 12 and 13 are pending. Claims 1, 11 and 12 have been amended. Claims 2-10 and 14 have been cancelled without prejudice. Claims 1, 11 and 12 are independent.

Substitute drawings are submitted herewith that reflect the changes required in the Office Action. In particular, Figures 12-17 have been labeled as “Prior Art”. No new matter has been added.

Applicants note with appreciation the indication that Claims 12 and 13 would be allowable if rewritten so as not to depend from a rejected claim, and with no change in scope. Since claim 12, from which claim 13 depends, has been so rewritten, claims 12 and 13 are now believed to be in condition for allowance.

Claims 2, 4, 5, 8, 11 and 14 were objected to due to informalities and claim 6 was rejected under 35 U.S.C. § 112, second paragraph, as indefinite. The cancellation of claims 2, 4, 5, 8 and 14 renders the objections and rejection of those claims moot. Claim 11 has been rewritten as an independent claim, incorporating the features of allowable claim 12, obviating the objections to claim 11. Amended claim 11 is believed allowable for at least the same reasons as amended claim 12.

Claims 1, 2 and 7 were rejected under 35 U.S.C. § 102(b) as anticipated by Noirie et al. Claims 3-5, 8 and 9 were rejected under 35 U.S.C. § 103 as obvious from Norie et al. in view of Wu et al. and Kuo et al. Claim 6 was rejected under U.S.C. § 103 as obvious from Norie et al. in view of Wu et al. and Kuo et al. and further in view of Jue et al. Claims 10 and 11 were rejected under U.S.C. § 103 as obvious from Norie et al. in view of Wu et al., Kuo et al. and Jue et al. and further in view of Applicant’s Admitted Prior Art. Claim 14 was rejected under 35 U.S.C. § 103 as obvious from Norie et al. in view of Wu et al. and Kuo et al. and

further in view of DeMartino. The cancellation of claims 2-10 and 14 render their rejections moot. Applicants submit that amended claim 1 is patentable for at least the following reasons.

An optical cross-connecting device for switching wavelength multiplexed signals input from a plurality of optical fibers. The device includes switching means for switching per wavelength group for a part of a plurality of the wavelength multiplexed signals. The switching means includes: a first optical switch for switching the wavelength multiplex signals; first wavelength group demultiplexers for dividing input wavelength multiplexing signals output from the first optical switch into a plurality of wavelength groups having first granularity; second optical switches for switching, per wavelength group, for only signals having the first granularity; second wavelength group demultiplexers for dividing a part of a plurality of wavelength groups output from the second optical switches into a plurality of wavelength groups having a second granularity smaller than the first granularity; and third optical switches for switching per wavelength signal and adding/dropping for individual wavelength signals extracted from the groups output from the second wavelength group demultiplexers.

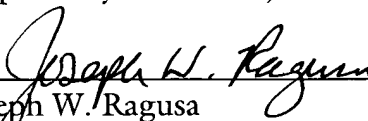
Norie et al. shows a design for an optical cross connect that utilizes multigranularity to reduce the size of the switching matrix. However, there is no teaching or suggestion in Norie et al. of the recited first wavelength group demultiplexers for dividing input wavelength multiplexing signals output from the first optical switch into a plurality of wavelength groups having first granularity, second optical switches for switching, per wavelength group, for only signals having the first granularity; second wavelength group demultiplexers for dividing a part of a plurality of wavelength groups output from the second optical switches into a plurality of wavelength groups having a second granularity smaller than the first granularity, and third optical switches for switching per wavelength signal and adding/dropping for individual wavelength signals extracted from the groups output from the second wavelength group demultiplexers. For at least this reason, amended claim 1 is believed patentable over Norie et al.

The other art cited in the office action does not remedy the deficiencies of Norie et al., discussed above, as a reference against amended independent claim 1 herein.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

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Respectfully submitted,

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AMENDMENTS TO THE DRAWINGS

Please replace the originally filed drawings sheets with the replacement sheets submitted herewith. The changes comprise adding “PRIOR ART” to Figures 12-17.